



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,721	04/13/2007	Hirotschi Iwasaki	0121/0060	2814
21395 7590 08/02/2011				
LOUIS WOO				
LAW OFFICE OF LOUIS WOO				
717 NORTH FAYETTE STREET				
ALEXANDRIA, VA 22314				
EXAMINER				
LEWIS, ALICIA M				
ART UNIT		PAPER NUMBER		
2164				
MAIL DATE		DELIVERY MODE		
08/02/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/593,721

## Applicant(s)

IWASAKI ET AL.

## Examiner

ALICIA LEWIS

## Art Unit

2164

**Period for Reply**  
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 82-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 82-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This non-final office action is responsive to communication filed June 16, 2010.  
Claims 1-81 are canceled and new claims 82-96 have been added.

#### ***Claim Objections***

1. Claim 92 is objected to because of the following informalities: The claim language "capable of" should be changed to "configured to." Appropriate correction is required.
2. Claims 84, 89 and 94 are objected to because of the following informalities: The term "user's liking" is ambiguous. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 87-91 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 87-91 are directed to a program table creation device comprising a constraint condition solution unit. However, the constraint condition solution unit appears to refer to a software module or program. Therefore, the creation device does not necessarily include any hardware elements and thus appears to be directed to an arrangement of software, per se.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 82, 84, 85, 87, 89, 90, 92, 94 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2003/0114968 A1) ('Sato') in view of Barton (US 2011/0078035 A1).

With respect to claims 82 and 87, Sato teaches a device and method of creating a program table to define a temporal arrangement of a plurality of contents, said method comprising the steps of:

utilizing a constraint condition solution unit to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents (paragraphs 35-40 and 44); and

utilizing a constraint condition solution unit to create said program table again through the use of a constraint solution technique according to priorities (paragraphs 54-55, 82, and 111) (*Sato teaches when there is excess time (i.e. an excess state) the system modifies the program list to extend the time length. He further teaches that extended priorities are used to determine the order/priority in which programs should be extended*).

Sato does not explicitly teach creating a program table with the time length of each of said plurality of contents unchanged, by introducing a new constraint condition according to priorities of said constrain conditions.

Barton teaches an electronic content distribution and exchange system (see abstract), in which he teaches creating a program table (*schedule*) with the time length of each of said plurality of contents unchanged, by introducing a new constraint condition according to priorities of said constrain conditions (paragraph 174). (*Barton teaches that a schedules program may be deleted from the schedule if a change in view preferences identifies a higher priority program that could be recorded at the same time.*)

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sato by the teaching of Barton to enable authenticated, reliable content downloads and tracking capabilities based on user preferences and time constraints (Barton, abstract).

With respect to claims 84 and 89, Sato teaches a device and method of creating a program table to define a temporal arrangement of a plurality of contents, said method comprising the steps of:

utilizing a constraint condition solution unit to create said program table through the use of a constraint solution technique on the basis of a constraint condition related

to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents (paragraphs 35-40 and 44); and

wherein said constraint solution unit creates said program table on the basis of a correlation between said contents with respect to said plurality of content according to user's liking information (Sato, paragraphs 40 and 44).

Sato does not teach creating a program table by referring scores sets with respect to said plurality of contents according to user's liking.

Barton teaches an electronic content distribution and exchange system (see abstract), in which he teaches creating a program table by referring scores sets with respect to said plurality of contents according to user's liking (paragraphs 141, 145 and 174). (*Barton teaches that a user sets priorities (scores) for programs according to a preference (liking.)*)

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sato by the teaching of Barton to enable authenticated, reliable content downloads and tracking capabilities based on user preferences and time constraints (Barton, abstract).

With respect to claims 85, 90 and 95, Sato in view of Barton teaches that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis (Sato, Figures 3 and 5, paragraphs 44-45, 47 and 77).

With respect to claim 92, Sato teaches a program table creation system for creating a program table to define a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in a predetermined network (paragraph 23), so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents (paragraphs 35-40 and 44);

to create said program table again through the use of a constraint solution technique according to priorities (paragraphs 54-55, 82, and 111) (*Sato teaches when there is excess time (i.e. an excess state) the system modifies the program list to extend the time length. He further teaches that extended priorities are used to determine the order/priority in which programs should be extended*); and

a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server (paragraphs 24 and 31).

Sato does not explicitly teach creating a program table with the time length of each of said plurality of contents unchanged, by introducing a new constraint condition according to priorities of said constrain conditions.

Barton teaches an electronic content distribution and exchange system (see abstract), in which he teaches creating a program table (*schedule*) with the time length of each of said plurality of contents unchanged, by introducing a new constraint condition according to priorities of said constrain conditions (paragraph 174). (*Barton teaches that a schedules program may be deleted from the schedule if a change in view preferences identifies a higher priority program that could be recorded at the same time.*)

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sato by the teaching of Barton to enable authenticated, reliable content downloads and tracking capabilities based on user preferences and time constraints (Barton, abstract).

With respect to claim 94, Sato teaches a program table creation system for creating a program table to define a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in a predetermined network (paragraph 23), so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents (paragraphs 35-40 and 44), wherein said constraint solution unit creates said program table on the basis of a correlation between said contents with respect to



said plurality of content according to user's liking information (Sato, paragraphs 40 and 44); and

a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server (paragraphs 24 and 31).

Sato does not teach creating a program table by referring scores sets with respect to said plurality of contents according to user's liking.

Barton teaches an electronic content distribution and exchange system (see abstract), in which he teaches creating a program table by referring scores sets with respect to said plurality of contents according to user's liking (paragraphs 141, 145 and 174). (*Barton teaches that a user sets priorities (scores) for programs according to a preference (liking.)*)

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Sato by the teaching of Barton to enable authenticated, reliable content downloads and tracking capabilities based on user preferences and time constraints (Barton, abstract).

7. Claims 83, 88 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2003/0114968 A1) ('Sato') in view of Barton (US 2011/0078035 A1), as applied to claims 82, 84, 85, 87, 89, 90, 92, 94 and 95 above, and further in view of Chasen et al. (US 6,760,721 B1) ('Chasen').

With respect to claims 83, 88 and 93, Sato in view of Barton teaches wherein time length of each of said elements has some range (Sato, paragraphs 40 and 43-44).

Although Sato teaches said program table data, Sato in view of Barton does not teach utilizing a tree structuring means to express said program table by a tree structure having one or a plurality of hierarchies in which elements indicative of said contents constituting said program table are disposed in a lowest-rank layer and elements summarizing features of lower-rank elements are disposed in a rank higher with respect to the elements indicative of said contents.

Chasen teaches a system and method of managing metadata data (see abstract), in which he teaches utilizing a tree structuring means to express said program table by a tree structure having one or a plurality of hierarchies in which elements indicative of said contents constituting said table are disposed in a lowest-rank layer (*i.e. track names*) and elements summarizing features of lower-rank elements (*i.e. albums, artist, genre*) are disposed in a rank higher with respect to the elements indicative of said contents (col. 3 line 59 – col. 4 line 8, Table 1 in column 11, and “Groupings Tree” in columns 13-14).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Sato by the teaching of Chasen to enable a user to easily access and view data by arranging data in a hierarchical arrangement. For example, groupings tree provide ways to group and categorize audio

data and playlist trees provide ways to create and provide ordered lists of audio tracks (Chasen, col. 3 lines 66-67, col. 4 lines 7-8).

8. Claims 86, 91 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2003/0114968 A1) ('Sato') in view of Barton (US 2011/0078035 A1), as applied to claims 82, 84, 85, 87, 89, 90, 92, 94 and 95 above, and further in view of Foote et al. (US 2003/0205124 A1) ('Foote').

With respect to claims 86, 91 and 96, Sato in view of Barton teaches arranging of contents is optimized (Sato, paragraph 40 and 44).

Sato in view of Barton does not teach an arrangement of said contents is optimized so that a correlation between said contents adjacent to each other reaches a maximum as a whole.

Foote teaches a method and system for retrieving and sequencing music by rhythmic similarity (see abstract), in which he teaches an arrangement of said contents is optimized so that a correlation between said contents adjacent to each other reaches a maximum as a whole (paragraphs 97-98, 109 and 111).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Sato by the teaching of Foote because an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said

contents adjacent to each other reaches a maximum as a whole would enable a smooth transition between content, such as music files (Foote, paragraphs 97-98).

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 82-96 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALICIA LEWIS whose telephone number is (571)272-5599. The examiner can normally be reached on Monday - Friday, 9 - 6:30, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alicia M Lewis/  
Primary Examiner, Art Unit 2164  
August 1, 2011